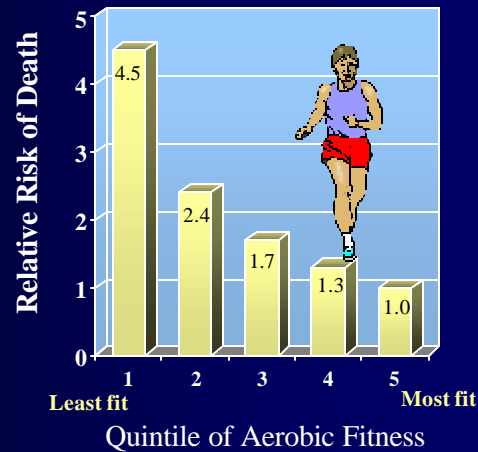


Exercise Capacity Predicts Mortality

- Study includes 6213 men tested on treadmill to determine aerobic capacity
- Overall mortality was determined after 6.2 yrs
- Adjusting for age, peak aerobic capacity was a strong predictor of mortality rates

NEJM, 346:793-801, Mar 14, 2002

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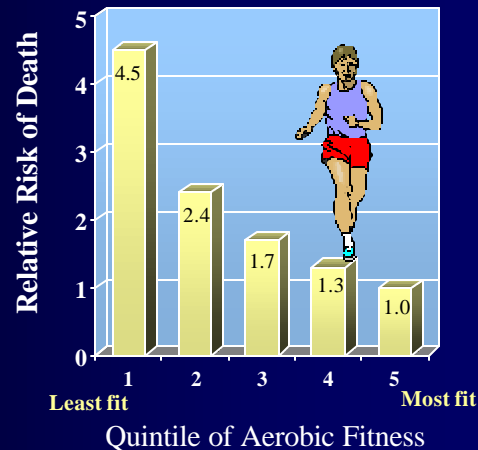
In this study, aerobic capacity, after adjusting for age, was a strong predictor of mortality rates. Notice that the largest increase in mortality was between the most unfit and the next category. Those who are unfit have the most to gain from a regular exercise program!

Reference

Jonathan Myers, et al, Exercise Capacity and Mortality among Men Referred for Exercise Testing, New England Journal of Medicine 346:793-801, March 14, 2002

Exercise Capacity Predicts Mortality

- Least fit men were 4.5 times more likely to die than the most fit men
- In those who already had a history of heart disease, the least fit men were 4.1 times more likely to die than the most fit men



NEJM, 346:793-801, Mar 14, 2002

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Men in this study were divided into two groups: those with a history of heart disease, and healthy men (no heart disease). In the group of healthy men, the least fit men (bottom 20%) were 4.5 times more likely to die during this study period (from any cause) than the most fit (top 20%). The most fit healthy men had MET levels of 13.0 or higher. The least fit had peak aerobic capacities less than 6.0 METs.

In those men who had a history of heart disease (3679 men) those who were least fit (<5.0 METs) were 4.1 times more likely to die than the most fit (10.7+ METs) men.

The graph above shows data for the healthy men group. Those with heart disease had a graph that was very similar.

Reference

Jonathan Myers, et al, Exercise Capacity and Mortality among Men Referred for Exercise Testing, New England Journal of Medicine 346:793-801, March 14, 2002

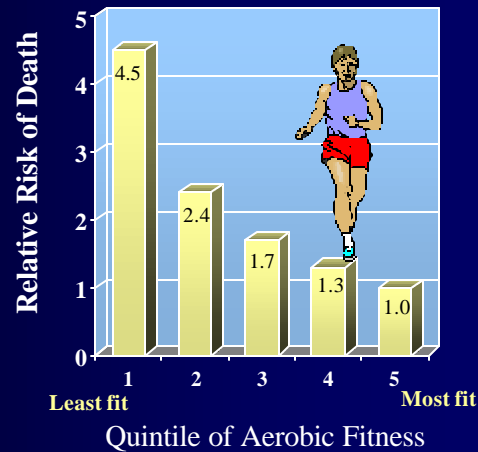
Exercise Capacity Predicts Mortality

In all men, peak aerobic capacity was a better predictor of mortality than:

- High blood pressure
- Smoking
- Diabetes
- Cholesterol levels
- Abnormal ECGs
- History of heart disease

NEJM, 346:793-801, Mar 14, 2002

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Of all the traditional risk factors, the level of physical capacity was a stronger predictor of who would survive and who wouldn't.

Reference

Jonathan Myers, et al, Exercise Capacity and Mortality among Men Referred for Exercise Testing, New England Journal of Medicine 346:793-801, March 14, 2002

Summary Findings

- This study confirms the presence of a graded, inverse relation between exercise capacity and mortality
- For every one MET increase in treadmill performance, there was a 12% increase in survival
- The greatest health benefits are achieved by increasing physical activity among the least fit
- If you have a health risk (high cholesterol, diabetes, smoker, high BP etc.) being fit cuts your mortality in half compared to being unfit

NEJM, 346:793-801, Mar 14, 2002

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These findings show how important being fit is to your survival. The good news is that fitness levels can be improved with regular, aerobic exercise.

Reference

Jonathan Myers, et al, Exercise Capacity and Mortality among Men Referred for Exercise Testing, New England Journal of Medicine 346:793-801, March 14, 2002